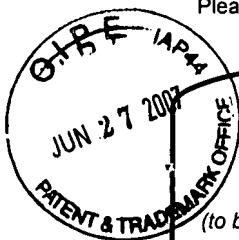


# EXHIBIT 3

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# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	10/613,103
Filing Date	July 7, 2003
Inventor(s)	H. A. Liu
Group Art Unit	2609
Examiner Name	Wanda Z. Russell
Attorney Docket Number	129250-001018/US

## ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input checked="" type="checkbox"/> Amendment <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application)  <input type="checkbox"/> Letter to the Official Draftsperson and _____ Sheets of Formal Drawing(s)  <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Revocation/POA and Change of Address  <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> LETTER SUBMITTING APPEAL BRIEF AND APPEAL BRIEF (w/clean version of pending claims) <input type="checkbox"/> Appeal Communication to Group (Notice of Appeal, <u>Brief</u> , Reply Brief) <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input type="checkbox"/> Other Enclosure(s) (please identify below):		
<table border="1"> <tr> <td>Remarks</td> <td></td> </tr> </table>			Remarks	
Remarks				

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	CAPITOL PATENT & TRADEMARK LAW FIRM PLLC	Attorney Name	John E. Curtin	Reg. No.	37,602
Signature					
Date	June 27, 2007				

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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/613,103

Filing Date: July 7, 2003

Applicant: H. A. Liu

Group Art Unit: 2609

Examiner: Wanda Z. Russell

Title: METHODS AND DEVICES FOR CREATING AN  
ALTERNATIVE PATH FOR A BI-DIRECTIONAL LSP

Attorney Docket: 129250-001018/US

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

June 27, 2007

**Mail Stop—Amendment**

**Amendment**

Sir:

In response to the Office Action mailed April 6, 2007 the Applicant submits the following remarks.

**A Listing of Claims** begins on page 3 of this paper.

**A Remarks** section begins on page 10 of this paper.

**IN THE SPECIFICATION**

Please replace the following paragraph of the specification. Applicant includes herewith an Attachment for Specification Amendments showing a marked up version of the replacement paragraph.

Page 1:

**[0003]** Existing MPLS Fast Re-routing techniques are effective in re-routing MPLS labeled traffic in an LSP acting independently relative to other LSPs. However, when LSPs are bundled together to operate in two directions, such as in bi-directional LSPs disclosed in U.S. Patent Application No. 10/613,104, MPLS Fast Re-routing does not perform well.

**IN THE CLAIMS**

The following is a complete listing of pending claims with status identifiers in parenthesis.

**LISTING OF CLAIMS**

1. (Original) A system for re-routing traffic from a bi-directional Label Switched Path (LSP) comprising: an originating network device operable to: re-route traffic traveling along a bi-directional LSP in a forward direction to an alternate path in the forward direction; and transmit a switch over message along the alternate path in the forward direction to a merging network device responsible for re-routing traffic traveling along the bi-directional LSP in a backward direction to the alternate path in the backward direction.

2. (Original) The system of claim 1, wherein the originating network device is further operable to transmit a second message, along the alternate path in the forward direction, to the merging network device to allow traffic to travel along the bi-directional LSP in the backward direction when a failure is no longer detected.

3. (Original) The system of claim 1, wherein the originating network device is a multi-protocol label switched (MPLS) device.

4. (Original) The system of claim 1 wherein the bi-directional LSP is comprised of an LSP carrying traffic in the forward direction and another LSP carrying traffic in the backward direction.

5. (Original) The system of claim 1 further comprising a merging network device operable to receive the switch over message and to re-route traffic traveling along the bi-directional LSP in the backwards direction to the alternate path in the backwards direction based on the switch over message.

6. (Original) The system of claim 5, wherein, the merging network device is further operable to: receive a second message along the alternate path in the forward direction; and allow traffic to travel along the bi-directional LSP in the backward direction when a failure is no longer detected based on said second message.

7. (Original) The system of claim 5 wherein the merging network device is a MPLS device.

8. (Original) A merging network device operable to: receive a switch over message; and re-route traffic traveling along a bi-directional LSP in a backwards direction to an alternate path in the backwards direction based on the switch over message.

9. (Original) The device as in claim 8 further operable to: receive a second message along the alternate path in the forward direction; and allow traffic to travel along the bi-directional LSP in the backward direction when a failure is no longer detected based on said second message.

10. (Original) The device of claim 8 wherein, the merging network device is a MPLS device.

11. (Original) A method for re-routing traffic from a bi-directional LSP comprising the steps of: re-routing traffic traveling along a bi-directional LSP in a forward direction to an alternate path in the forward direction; and transmitting a switch over message along the alternate path in the forward direction to a merging network device responsible for re-routing traffic traveling along the bi-directional LSP in a backward direction to the alternate path in the backward direction.

12. (Original) The method of claim 11 further comprising the step of: transmitting a second message, along the alternate path in the forward direction, to the merging network device to allow traffic to travel along the bi-directional LSP in the backward direction when a failure is no longer detected.

13. (Original) The method of claim 11 wherein the bi-directional LSP is comprised of an LSP carrying traffic in the forward direction and another LSP carrying traffic in the backward direction

14. (Original) The method of claim 11 further comprising the steps of: receiving the switch over message; and re-routing traffic traveling along the bi-directional LSP in the backwards direction to the alternate path in the backwards direction based on the switch over message.

15. (Original) The method of claim 14 further comprising the steps of: receiving a second message along the alternate path in the forward direction; and allowing traffic to travel along the bi-directional LSP in the backward direction when a failure is no longer detected based on said second message.

16. (Original) A method for re-routing traffic comprising the steps of: receiving a switch over message; and re-routing traffic traveling along a bi-directional LSP in a backwards direction to an alternate path in the backwards direction based on the switch over message.

17. (Original) The method of claim 16 further comprising the steps of: receiving a second message along the alternate path in the forward direction; and allowing traffic to travel along the bi-directional LSP in the backward direction when a failure is no longer detected based on said second message.



18. (Original) A system for re-routing traffic comprising: an originating network device comprising: means for re-routing traffic traveling along a bi-directional LSP in a forward direction to an alternate path in the forward direction; and means for transmitting a switch over message along the alternate path in the forward direction to a merging network device responsible for re-routing traffic traveling along the bi-directional LSP in a backward direction to the alternate path in the backward direction.

19. (Original) The system of claim 18, wherein the originating network device further comprises means for transmitting a second message, along the alternate path in the forward direction, to the merging network device to allow traffic to travel along the bi-directional LSP in the backward direction when a failure is no longer detected.

20. (Original) The system of claim 18 wherein the bi-directional LSP is comprised of an LSP carrying traffic in the forward direction and another LSP carrying traffic in the backward direction.

21. (Original) The system of claim 1 further comprising a merging network device which comprises means for receiving the switch over message and means for re-routing traffic traveling along the bi-directional LSP in the

backwards direction to the alternate path in the backwards direction based on the switch over message.

22. (Original) The system of claim 21, wherein, the merging network device further comprises: means for receiving a second message along the alternate path in the forward direction; and means for allowing traffic to travel along the bi-directional LSP in the backward direction when a failure is no longer detected based on said second message.

23. (Original) A merging network device comprising: means for receiving a switch over message; and means for re-routing traffic traveling along a bi-directional LSP in a backwards direction to an alternate path in the backwards direction based on the switch over message.

24. (Original) The device as in claim 23 further comprising: means for receiving a second message along the alternate path in the forward direction; and means for allowing traffic to travel along the bi-directional LSP in the backward direction when a failure is no longer detected based on said second message.

25. (Original) A system for re-routing traffic comprising: means for re-routing traffic traveling along a bi-directional LSP in a forward direction to an alternate path in the forward direction; means for transmitting a switch over message, along the alternate path in the forward direction, for re-routing traffic traveling

along the bi-directional LSP in a backward direction; means for receiving the switch over message; and means for re-routing traffic traveling along the bi-directional LSP in a backwards direction to the same alternate path in the backwards direction based on the switch over message.

**REMARKS****A. The Section 102 Rejections**

Claims 1-25 were rejected under 35 U.S.C. §102(a) based on U. S. Patent Publication No. 2003/0063613 to Carpini et al (“Carpini”). Applicant disagrees and traverses these rejections for at least the following reasons.

Each of the claims of the present invention includes the feature of, among other things, the re-routing of traffic from a bi-directional Label Switched Path (LSP) and the use of a switch-over message by a merging network device to re-route traffic traveling along the bi-directional LSP in a backwards direction. Carpini does not appear to disclose or suggest either feature.

Contrary to the Examiner’s position, Carpini does not appear to disclose “bi-directional LSPs”. Instead, Carpini appears to disclose the use of separate, one-way LSPs; one for the forward direction and one for the backwards direction.

In addition, there is no disclosure or suggestion of a switch-over message being used by a merging network device to re-route traffic in a backwards direction. The excerpts cited in the Office Action (paragraph 47, lines 15-19) appear to relate to the detection of a “fault indication” message, not a switch-over message. The former relates to fault detection; the latter relates to the re-routing of traffic along an alternative, bi-directional LSP in a backwards direction.

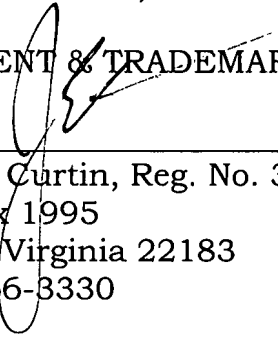
Because Carpini does not disclose each and every feature of claims 1-25 it cannot anticipate the subject matter of these claims under 35 U.S.C. §102(a). Accordingly, Applicant respectfully requests withdrawal of the pending rejections and allowance of claims 1-25.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John E. Curtin at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 50-3777 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

CAPITOL PATENT & TRADEMARK LAW FIRM, PLLC.

By   
\_\_\_\_\_  
John E. Curtin, Reg. No. 37,602  
P.O. Box 1995  
Vienna, Virginia 22183  
(703) 266-3330

**REMARKS****A. The Section 102 Rejections**

Claims 1-25 were rejected under 35 U.S.C. §102(a) based on U. S. Patent Publication No. 2003/0063613 to Carpini et al (“Carpini”). Applicant disagrees and traverses these rejections for at least the following reasons.

Each of the claims of the present invention includes the feature of, among other things, the re-routing of traffic from a bi-directional Label Switched Path (LSP) and the use of a switch-over message by a merging network device to re-route traffic traveling along the bi-directional LSP in a backwards direction. Carpini does not appear to disclose or suggest either feature.

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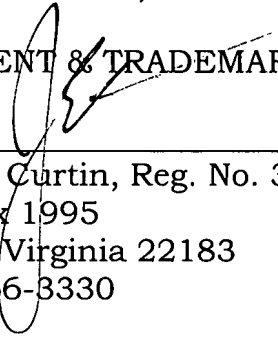
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Respectfully submitted,

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By   
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(703) 266-3330

**ATTACHMENT FOR SPECIFICATION AMENDMENT**  
**REPLACEMENT PARAGRAPH**  
**MARKED-UP VERSION**

**[0003]** Existing MPLS Fast Re-routing techniques are effective in re-routing MPLS labeled traffic in an LSP acting independently relative to other LSPs. However, when LSPs are bundled together to operate in two directions, such as in bi-directional LSPs disclosed in U.S. Patent Application No. [[----- filed concurrently with the present application]], MPLS Fast Re-routing does not perform well.